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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,937	04/28/2005	Shuji Doi	Q87467	3089
23373	7590	10/05/2010	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			YAMNITZKY, MARIE ROSE	
			ART UNIT	PAPER NUMBER
			1786	
			NOTIFICATION DATE	DELIVERY MODE
			10/05/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/532,937	<b>Applicant(s)</b> DOI ET AL.	
	<b>Examiner</b> Marie R. Yamnitzky	<b>Art Unit</b> 1786	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 2, 12-22 and 31-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11 and 23-30 is/are rejected.
- 7) ☒ Claim(s) 1, 3-11 and 23-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>19 Jan 2010</u> .   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1786

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions (amendment and IDS) filed on January 19, 2010 have been entered.

2. The amendment filed January 19, 2010 amends claims 6, 8 and 9.

Claims 1-42 are pending.

The claims remain subject to restriction and election of species requirements under 35 U.S.C. 121 and 372. Claims 1, 3-11 and 23-30 continue to read on the previously elected invention and species.

3. Claims 2, 12-22 and 31-42 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions or species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 11, 2008.

The examiner notes that none of the withdrawn claims meets the conditions for rejoinder if any of present claims 1, 3-11 and 23-30 were to be found in condition for allowance.

4. The rejection of claims 6-9 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, as set forth in the Office action mailed July 20, 2009 is overcome by the amendment filed January 10, 2010.

Art Unit: 1786

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 3-11 and 23-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-10 and 15-27 of copending Application No. 10/573,839. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is substantial overlap between the polymer and products comprising the polymer per the copending claims, and the polymer and products comprising the polymer per the present claims.

There is substantial overlap between a polymer as required for copending claim 1 and a polymer according to present claim 1 wherein  $-X^1-X^2-$  represents any of the first ten formulae set forth for  $-X^1-X^2-$  in present claim 1. (Present claim 3 limits  $-X^1-X^2-$  to the first ten formulae

Art Unit: 1786

set forth for  $-X^1-X^2-$  in present claim 1.) The scope of the variables  $R^{11}$  and  $R^{12}$  in copending claim 1 is narrower than present  $R^1$  and  $R^2$ , and the scope of the variables  $R^3-R^8$  in copending claim 1 is broader than present  $R^3-R^8$ . A polymer according to copending claim 1 wherein  $X^5$  is O, S, C(=O), S(=O) or  $SO_2$ , is a polymer within the scope of present claim 1. A polymer according to copending claim 1 wherein  $X^5$  is  $Si(R^3)(R^4)$ ,  $N(R^5)$ ,  $B(R^6)$ ,  $P(R^7)$  or  $P(=O)(R^8)$  and  $R^3-R^8$  are selected from “hydrogen atom...monovalent heterocyclic group”, “arylalkenyl group...carboxyl group” or “cyano group” is also a polymer within the scope of present claim 1.

With respect to the further limitations of the polymer per present claims 4-9, compare to copending claims 4-9.

While the present claims do not require a compound exhibiting light emission from a triplet excited state to be present in combination with the polymer (as is required by the copending claims), the present claims include claims which comprise components in addition to the polymer. For example, the composition of present claim 23 and the polymer light-emitting device of present claim 28 explicitly allow for a light emitting material in combination with the polymer of claim 1, and compounds exhibiting light emission from a triplet excited state were known in the art at the time of the invention. The language of present claims 24-27, 29 and 30 is also open and does not exclude the compound exhibiting light emission from a triplet excited state which is required by the copending claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1786

7. Claims 1, 3-7, 9-11 and 23-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3-11 of copending Application No. 11/572,513. Although the conflicting claims are not identical, they are not patentably distinct from each other because there appears to be substantial overlap between the polymer and products comprising the polymer per copending claims 1 and 3-10 and the polymer and products comprising the polymer per present claims 1, 3-7, 9-11, 23 and 25. An ink composition as per present claim 24 would have been obvious to one of ordinary skill in the art given copending claim 11 per which various printing methods can be used to make a film comprising the polymer of copending claim 1.

As stated above, there “appears to be” substantial overlap between the two sets of claims. This rejection is made subject to interpretation of the copending claims. Copending claim 1 as amended April 22, 2010 defines ten of the variables in formula (8) as having “the same meanings as described above” and defines another four of the variables as having “the same meanings as for the above-described Y...and p” but the definitions of the variables that were set forth prior to formula (8) have been deleted. Accordingly, fourteen of the variables of formula (8) are not defined in copending claim 1 as most recently amended. The definitions of  $X^1$ ,  $X^2$ ,  $Ar^1$  and  $Ar^2$  as set forth in copending claims 3-5, in combination, provide polymers meeting the limitations of the present claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1786

8. Claims 1, 3-11 and 23-30 are objected to because of the following informalities:

Some of the formulae set forth for  $-X^1-X^2-$  in claim 1 are not clearly readable, and may result in a printer's rush and/or printing error in the event that claim 1 is allowed and a patent issues from the present application. A complete listing of claims with clearly readable/clearly reproducible formulae is required.

In line 1 of claim 3, "claims 1" should read --claim 1--.

In the penultimate line of claim 4, a space should be inserted after " $R^{14}$ ".

In claim 7, in the line before formula (12), the period should be deleted (or changed to a comma).

In claim 7, in the line after formula (12), "represent" should read --represents--.

In claim 8, in the second line after formula (15), a comma should be inserted after the first occurrence of "group".

Appropriate correction is required.

9. The reference made of record and not relied upon is considered pertinent to applicant's disclosure.

US 7,723,455 B2 to Becker et al. does not constitute prior art, but is of interest because there is overlap between the present claims and the patent claims. A polymer according to patent claim 1 wherein X is N(R3) is a polymer comprising a repeating unit of present formula (1) wherein  $-X^1-X^2-$  represents a group having the second formula set forth for  $-X^1-X^2-$  in present claim 1.

Art Unit: 1786

10. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 7:00 a.m. to 3:30 p.m. Monday and Wednesday-Friday.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

/Marie R. Yamnitzky/  
Primary Examiner, Art Unit 1786

MRY  
September 30, 2010